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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,584	06/29/2001	Robert S. DeWitte	426.97.265	3885

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EXAMINER

WEBER, JON P

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 09/26/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/897,584

Applicant(s)

DEWITTE ET AL.

Examiner

Jon P. Weber, Ph.D.

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Status of the Claims

Claims 1-20 have been presented for examination.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4, drawn to a first method of designing a molecule by molecular modeling that binds to a protein's receptor site, classified in class 364, subclass 468.04 and class 345, subclass 420.
- II. Claim 5, drawn to a first product, a first library of compounds, classified in class 544, subclass 236 and in class 548, subclass 469.
- III. Claim 6, drawn to a second product, a second library of compounds, classified in class 585, subclass 23.
- IV. Claim 7, drawn to a second method of designing a molecule by molecular modeling that binds to the receptor site of a specific set of proteins, classified in class 364, subclass 468.04 and class 345, subclass 420.
- V. Claim 8, drawn to a third method of designing a designed molecule to the receptor site of a specific set of proteins, classified in class 364, subclass 468.04 and class 345, subclass 420.
- VI. Claim 9, drawn to a method, estimating the free energy of a designed molecule that binds to the receptor site of a specific set of proteins, classified for example, in class 364, subclass 468.04 and class 345, subclass 420.

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VII. Claims 10-15, drawn to a fourth method of designing a molecule by molecular modeling that binds to the receptor site of a specific set of proteins, classified in class 364, subclass 468.04 and class 345, subclass 420.

VIII. Claim 20, drawn to a molecule that binds to CD4, classified in class 546, subclass 90.

Claim 16 is generic to Groups IV and V, while claims 17-19 are generic to Groups IV, V, VI and VIII. If one of these Groups is elected, these claims will be examined with the elected Group insofar as the claims are encompassed by the elected Group.

The inventions are distinct, each from the other because:

Groups I, IV, V, VI and VII are each drawn to different methods of either designing a molecule to bind to a receptor site on a protein or to minimizing the free energy of interaction at a site. On their face, each of these modeling methods involves different steps and different procedures. The end results will vary depending on the detailed application of programs and input fragments. In none of these methods are any actual molecules made and tested for their ability to bind to the protein for which they were designed.

Groups II, III and VIII are each drawn to different products, two libraries and a compound which share no common features in their root structures.

Inasmuch as no products are actually made in any of the methods Groups, it cannot be said that any of the products of Groups II, III or VIII are made by any of the processes of Groups I, IV, V or VII. The process of Group VI does suggest how to make any products.

Because these inventions are distinct for the reasons given above and the Groups have acquired a separate status in the art as shown by their separate classification and divergent subject matter and because separate searches of the non-classified literature would be required, restriction for examination purposes as indicated is proper. The latter non-patent literature search requirement is especially true for the designing processes which are all classified together for lack of a better location.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is also reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

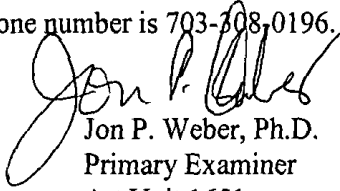
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon P. Weber, Ph.D. whose telephone number is 703-308-4015. The examiner can normally be reached on daily, off 1st Fri, 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Wityshyn can be reached on 703-308-4743. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is 703-708-0196.



Jon P. Weber, Ph.D.
Primary Examiner
Art Unit 1651

JPW
September 24, 2002